

# REC100

Decentralized Heat Recovery Unit

Double flow with heat recovery



Coupled installation in a single room or 2 separate rooms



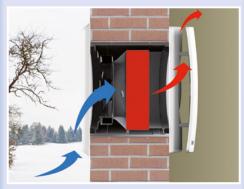
Comply with ErP Directive 2009/125/CE and EU Regulation 1253/2014

Classification: Residential Ventilation Unit.

Energy class **A** (with humidity sensor)

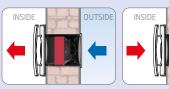
## Thermal efficiency up to 90%

- Ø100
- Easy Installation and maintenance:
  - Magnetic coupling/uncoupling of the unit
  - External grille with net, installable from the inside
  - Telescopic duct
- Wireless technology (REC duo 100 PLUS RC)
- Drastic solution to humidity and condensation problems



## **PRINCIPLE OF OPERATION**

REC duo 100 is a **"push-pull"** HRU with reverse flow. It is provided with a ceramic heat exchanger that accumulates the heat from the extracted air during the "pull" cycle and releases it to the new fresh air during the "push" cycle.









OUTSIDE

Heat Recovery ventilation systems effectively contribute to preventing the mould forming on the walls when this is caused by insufficient natural ventilation.

# ESCRIPTION

- Very high efficiency decentralized HRU with heat recovery up to 90%. Ideal for residential applications and in any environment where it is necessary to ensure a constant thermal comfort both in summer and in winter.
- Suitable for any kind of room. A coupled installation is recommended to optimize the system's efficiency, in a
- single room or in separate rooms.

  Direct exhaust through walls with thickness from 300 to 500 mm (adaptable to
- other wall thicknesses from 220 to 1000 mm: see section Dimensions). Suitable for conveying air to a max. temperature of 40°C.

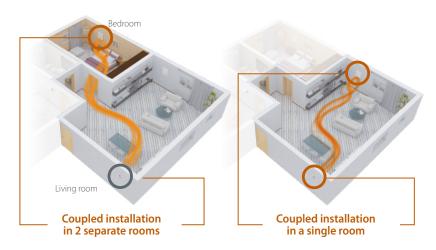
# FEATURES

- Stylish and ultra-slim front cover. Very compact dimensions.
- High efficiency ceramic heat exchanger.

  Provided with G3-class filters both in intake and in extract, easily removable and washable
- Free-cooling function.
- EC brushless motor. Complies with EN 60335-2-80, LVD 2014/35/EU, EMC 2014/30/EU. IPX4
- **CE** marked

# INSTALLATION EXAMPLES

Ideal in noble rooms such as bedrooms and living rooms. Maximum benefit with coupled installation.



# OPERATING SCHEME

**REC DUO 100 PLUS RC** 





# MODELS AND OPERATION



# **REC DUO 100** Cod. 2RC1100

24 hours running in push-pull modality at low speed (selectable between 2 at installation). The unit switches to the extraction operation modality when speed boost is activated through remote control switch or RLS controller (available as accessory). The maximum speed is provided with a timer (adjustable from 0 to 30 minutes). Once concluded the overrun via timer, the fan automatically switches back to the push-pull operation modality at low speed.



# **REC DUO 100 MHY** Cod. 2RC1200

24 hours running in push-pull modality at low speed (adjustable by the end-user). Boost speed is available in push-pull modality and turns on automatically via humidistat (adjustable from 40 to 90% of R.H) and increases/decreases progressively according to the detected humidity level. In case of a persistent and high concentration of humidity, the unit automatically switches to the extraction operation modality. It then switches back to the push-pull operation modality at low speed when the humidity level goes below the pre-selected threshold. The unit is supplied with a remote controller for the selection and activation of advanced comfort ventilation functions.

## **RLS** Cod. 2RV4158

Available upon request as accessory for REC DUO 100 and REC DUO 100 MHY



- On-Off
- Boost speed



#### REC DUO 100 PLUS RC Cod. 2RC1300

24 hours running in push-pull modality at low speed (selectable between 2 at installation). The unit switches to the extraction operation modality when speed boost is activated, manually or automatically:

**Manually** via control switch or RLS controller (available as accessory). The maximum speed is provided with a timer (adjustable from 0 to 30 minutes). Once concluded the overrun via timer, the fan automatically switches back to the push-pull operation modality at low speed.

**Automatically** via humidistat (adjustable from 40 to 90% of R.H). The fan speed increases/decreases according to the humidity level detected above the pre-selected threshold. It then switches back to the push-pull operation modality at low speed when the humidity level goes beneath the pre-selected threshold.

## REC DUO 100 PLUS RC is supplied with a remote controller,

to select the speed and activate the following operation modalities:

#### 0 On/off

## 1 - Push-pull operation modality

24 hours reverse flow running at the selected speed

## 2 - Speed 1

Low speed set up

### 3 - Speed 2

Low speed set up

## 4 - Boost speed with timer

(extraction mode only)

#### 5 - Sleep mode

the operation at low speed is frozen for 8 hours to ensure high acoustic comfort during the night. The function can be unblocked at any time by pressing any button (except button 0).

## 6 - Flow control

operation in intake or extract mode only. Press once: extraction mode. Press twice: intake mode

## 7 - Free-cooling mode: air exchange without heat recovery.

No reverse flow. Press once: the reverse flow stops and the fans go on running at the current flow. Press twice: all fans reverse their flow and go on running at the new selected flow.



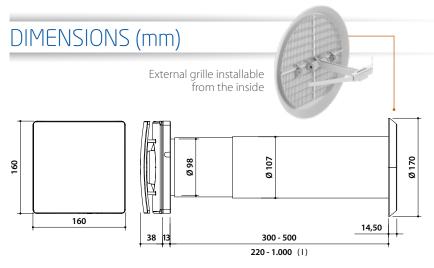


any time a button is pressed, a led switches on the remote controller to indicate that the signal has been received.

# **PERFORMANCE**

CODE	MODEL	DUCT	WALL THICKNESS	AIRFLOW min / max / only exhaust		<b>W</b> min / max / only exhaust	dB (A)*
		Ø (mm)	min-max (mm)	m³/h	l/s		Lp
2RC1100	REC Duo 100	107	300 - 500	12/30/40	3,3 / 8,3 / 11	1 / 2,8 / 3,5	15 / 29
2RC1200	REC Duo 100 MHY	107	300 - 500	12/30/40	3,3 / 8,3 / 11	1 / 2,8 / 3,5	15 / 29
2RC1300	REC Duo 100 PLUS RC	107	300 - 500	12/30/40	3,3 / 8,3 / 11	1 / 2,8 / 3,5	15 / 29

<sup>\*</sup>Lp(A) measured at 3 m in open field 230V-50Hz



## (I) For walls with thickness > 500 mm:

It is necessary to use the telescopic duct available as accessory

Cod. 2KT0014

# For wall thickness between 220 and 300 mm:

it is necessary to cut the duct and to use the external grille MFE, available as accessory





